

REMARKS

By this Amendment, claims 1, 11, 15-17, 31 and 33 are amended and claim 12 is canceled, without prejudice to or disclaimer of the subject matter thereof. Accordingly, claims 1-11 and 13-34 are pending in this application.

Independent claims 11, 15 and 17 are amended to recite features corresponding to those recited in original claim 12. Claims 1 and 31 are amended to recite the feature "without substantially stretching the sheet" which is shown in Fig. 2 as originally filed, wherein the edges of the sheet are not clamped. Claim 16 is amended to recite the feature "using a trimmer that is movable relative to said second mold portion" which is shown in Figs. 1-4 and 8-9 as originally filed. Claim 33 is amended to recite the feature "using at least one rib on one of said first and second portions, said rib engaging in at least one groove of the other of said first and second portions" which is shown in Figs. 5-6 as originally filed. Thus, it is respectfully submitted that no new matter is added.

Claims 15, 16, 20, 22-24 and 26 stand rejected under 35 U.S.C. §102(b) over Japanese Patent No. 5-154868 (hereafter, "Momotome"). This rejection is respectfully traversed.

Independent claim 15 recites *inter alia* "a method of manufacturing a reinforced plastics material part from a sheet of drapable material by using a mold comprising first and second mold portions that are movable relative to each other, said first portion comprising a die having a top portion, said top portion having a setback, the method comprising . . . pressing the sheet against the first portion at at least one location using at least one pusher mounted on the second portion of the mold and movable relative to said second portion, at least one of the pushers having an end of profile that corresponds substantially to the shape of the setback." It is respectfully submitted that none of the references of record disclose, teach or suggest this claimed combination of features.

As implicitly admitted by the Office Action by not rejecting claim 12 over Momotome, previously pending claim 12 reciting these features, Momotome fails to disclose, teach or suggest these features now recited in claim 15. Furthermore, the Office Action implicitly admits that King et al. also fails to disclose, teach or suggest these features now recited in claim 15 by not rejecting claim 12 over King et al.

Although the Office Action asserts that Keen et al. teaches "thermoformed articles with setbacks" in rejecting claims 9 and 10, it is respectfully submitted that Keen et al. cannot make up for this deficiency of Momotome and King et al. The apparatus according to Keen et al. comprises a multi-section male mold 20 having a plurality of sections 12, 13R, 13L movable relative to each other. As shown in Figs. 3 and 4, the sections 12, 13R, 13L are not configured to be engaged in a setback in the female mold 10, and thus do not have "an end of profile that corresponds substantially to the shape of a setback" as recited in claim 15.

Therefore, it is respectfully submitted that claim 15 is patentable. Further, it is respectfully submitted that claims 20, 22-24 and 26 are patentable at least in view of the patentability of claim 15 from which they depend, as well as for the additional features they recite.

Independent claim 16 recites *inter alia* "a method of manufacturing a reinforced plastics material part from a sheet of drapable material . . . comprising . . . pressing the sheet against the first portion at at least one location using at least one pusher mounted on the second portion of the mold and movable relative to said second portion" and "trimming of the portion of the sheet that projects from the join plane using a trimmer that is movable relative to said second mold portion." It is respectfully submitted that none of the references of record disclose, teach or suggest this claimed combination of features.

Momotome discloses a mold having an upper half comprising a core 25 and a core side pressing part 26 which is not movable relative to the core 25. Further, Momotome does

not teach or suggest a trimmer that is movable relative to a second mold portion in combination with a pusher that is movable relative the second mold portion.

Therefore, it is respectfully submitted that claim 16 is patentable.

In view of the foregoing, withdrawal of the rejection of claim 15, 16, 20, 22-24 and 26 under 35 U.S.C. §102(b) over Momotome is respectfully requested.

Claims 1-5, 7, 8, 11, 13, 15, 17-24, 26-28, 31 and 32 stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,182,787 to King et al. in view of Momotome. This rejection is respectfully traversed.

Independent claim 1 recites *inter alia* "pressing the sheet against the first portion at at least one location without substantially stretching the sheet using at least one pusher mounted on the second portion of the mold and movable relative to said second portion." Independent claim 31 similarly recites *inter alia* "pressing the sheet against the first portion of the mold initially using at least one pusher situated substantially in the center of the mold without substantially stretching the sheet, and then progressively using other pushers, a pusher furthest from the center of the mold being actuated last." It is respectfully submitted that none of the references of record disclose, teach or suggest these claimed features.

King et al. discloses an injection molding process wherein the film is stretched within the mold by inserting the core of the mold having a plunger 6 for stretching the film prior to the remainder of the core entering the mold. See, for example, the Abstract of King et al.

Thus, King et al. teaches away from a method step of pressing the sheet against a mold portion at at least one location without substantially stretching the sheet using a pusher. Therefore, it is respectfully submitted that a person of ordinary skill in the art would not have been motivated by any teachings in Momotome to modify the method taught by King et al. to not include stretching of the film as specifically taught by King et al.

In other words, King et al. specifically teaches away from such a modification such that combining the teachings of King et al. and Momotome would not have resulted in the methods recited in claims 1 and 31.

Therefore, it is respectfully submitted that claims 1 and 31 are patentable over the combination of King et al. and Momotome. Further, it is respectfully submitted that claims 2-5, 7, 8, 18, 19 and 32 are patentable at least in view of the patentability of claims 1 and 31 from which they respectively depend, as well as for the additional features they recite.

As discussed above, independent claims 11, 15 and 17 recite features that are not disclosed, taught or suggested by King et al. and Momotome. Therefore, it is respectfully submitted that claims 11, 15 and 17 are patentable over the combination of King et al. and Momotome. Further, it is respectfully submitted that claims 13, 20-24 and 26-28 are patentable at least in view of the patentability of claims 11 and 15 from which they respectively depend, as well as for the additional features they recite.

In view of the foregoing, withdrawal of the rejection of claims 1-5, 7, 8, 11, 13, 15, 17-24, 26-28, 31 and 32 under 35 U.S.C. §103(a) over King et al. and Momotome is respectfully requested.

Claims 3, 9, 10, 12, 21, 29 and 30 stand rejected under 35 U.S.C. §103(a) over King et al. and Momotome in view of U.S. Patent No. 3,115,678 to Keen et al. Applicants assume that claim 12 was intended to be rejected in section 13 of the Office Action rather than claim 13 as stated. Claim 14 stands rejected under 35 U.S.C. §103(a) over King et al. and Momotome in view of U.S. Patent No. 4,545,105 to Kowalsky. Claims 6 and 25 stand rejected under 35 U.S.C. §103(a) over King et al. and Momotome and Kowalsky in view of U.S. Patent No. 6,328,549 to Valyi et al. These rejections are moot with respect to canceled claim 12 and are respectfully traversed with respect to the remaining claims.

As discussed above, independent claims 1 and 15 are patentable over King et al. and Momotome. It is respectfully submitted that the additional applied references do not overcome the deficiencies of King et al. and Momotome with respect to claims 1 and 15.

Therefore, it is respectfully submitted that claims 3, 6, 9, 10, 14, 21, 25, 29 and 30 are patentable at least in view of the patentability of claims 1 and 15 from which they respectively depend, as well as for the additional features they recite. Withdrawal of the foregoing rejections under 35 U.S.C. §103(a) is respectfully requested.

Claims 33 and 34 stand rejected under 35 U.S.C. §103(a) over Momotome in view of Japanese Patent No. 1-141719 (hereafter, "Yamamoto"). This rejection is respectfully traversed.

Independent claim 33 recites *inter alia* "pre-trimming the sheet using at least one rib on one of said first and second portions, said rib engaging in at least one groove of the other of said first and second portions." It is respectfully submitted that none of the references of record disclose, teach or suggest these claimed features.

Momotome discloses a method of injection molding using a cutting part 27 to close the cavity in which the synthetic resin 18 is injected. The cutting part 27 then cuts off entirely the fringe part of the laminated sheet 23. Thus, Momotome teaches away from a method step of pre-trimming the laminated sheet.

Yamamoto discloses making an article by thermoforming, as opposed to injection molding as in Momotome, and provides a mold with air outlets 3 in order to make holes on the formed sheet. Yamamoto does not disclose, teach or suggest a mold having a rib on one of first and second portions of the mold with the rib engaging in at least one groove of the other of the first and second portions, let alone such that a first portion of the sheet is connected to a second part of the sheet by a bridge of material extending between cut outs, as recited in claim 33.

Therefore, it is respectfully submitted that claim 33 is patentable over the combination of Momotome and Yamamoto. Further, it is respectfully submitted that claim 34 is patentable at least in view of the patentability of claim 33 from which it depends, as well as for the additional features it recites. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) over Momotome and Yamamoto is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-11 and 13-34 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachments:

Request for Continued Examination
Petition for Extension of Time

Date: November 7, 2003

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